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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,366

02/11/2005

Jurgen Meyer

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EXAMINER

HAILEY, PATRICIA L

ART UNIT

PAPER NUMBER

1793

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/524,366	Applicant(s) MEYER ET AL.	
	Examiner PATRICIA L. HAILEY	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2008 and 06 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,11,12 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,11,12 and 14-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/06/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Applicants' remarks and amendments, filed on September 6 and December 6, 2007, have been carefully considered. No claims have been canceled or added; claims 1, 4-7, 11, 12, and 14-20 remain pending in this application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Applicants' Priority Document was filed on February 11, 2005.

Withdrawn Rejections

The 102(b) rejection of claims 1, 4, 7, 11, 12, and 14-16 as being anticipated by Deller et al. (U. S. Patent No. 5,776,240) stated in the previous Office Action, has been withdrawn in view of Applicants' persuasive arguments traversing this rejection.

The 102(b) rejection of claims 1, 4, 7, and 11 as being anticipated by Ettlinger et al. (U. S. Patent No. 5,665,156) stated in the previous Office Action, has been withdrawn in view of Applicants' persuasive arguments traversing this rejection.

New Grounds of Rejection

The following New Ground of Rejection is being made in view of the Examiner's reconsideration of the pending claims, and in view of the Examiner's inspection of copending Application Serial No. 10/522,903.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. *Claims 1, 6, 7, 17, and 18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 8, 9, and 14-16 of copending Application No. 10/522,903.*

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in the instant application are drawn to silanised, structurally modified pyrogenically produced silicas characterized by octylsilyl and/or hexadecylsilyl groups fixed to their surface (**claim 1**), and to lacquer compositions comprising said silicas (**claims 6, 7, 17, 18**).

The claims in the copending application are drawn to a lacquer composition comprising silanized, structurally modified pyrogenic silica, wherein said silica can have attached to the surface thereof an alkylsilyl group according to the molecular formula $\text{SiC}_n\text{H}_{2n+1}$, wherein "n" is from 2 to 18 (**claims 2, 8, and 9**), and to said silanized, structurally modified pyrogenic silica itself (**claims 14-16**).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Maintained Rejections

The following rejection of record has been maintained; the text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1, 4-7, 11, 12, and 14-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Deller et al. (U. S. Patent No. 5,776,240) or Ettlinger et al. (U. S. Patent No. 5,665,156) taken with Nargiello et al. (U. S. Patent No. 6,193,795).

Deller et al. disclose granules based on silicon dioxide. The particles may be prepared by dispersing pyrogenically prepared silicon dioxide in water, spray drying it and silanizing the granules obtained with agents such as halosilanes, alkoxysilanes, silazanes, and/or siloxanes. See col. 1, line 48 to col.2, line 5 of Deller et al.

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Exemplary agents include organosilanes of the type $(RO)_3Si(C_nH_{2n+1})$, where R is alkyl and $n = 1$ to 20. Preferably, the silanizing agent is trimethoxyoctylsilane. See col. 3, lines 20-21 and col. 5, lines 32-33 of Deller et al.

The silanization may be carried out by spraying the granular material with the silanizing agent, and subsequently heat-treating (under a protective inert gas, such as nitrogen) the mixture at a temperature of from $105^{\circ}C$ to $400^{\circ}C$ over a period of 1 to 6 hours.

The silanization can be carried out with heatable mixers equipped with spraying facilities; examples include ploughshare mixers disk dryers, or fluidized bed dryers. See col. 6, lines 6-11 of Deller et al.

Ettlinger et al. teach silanized, pyrogenically prepared silicic acids that are prepared by treating said silicic acids with an organosilane selected from the group consisting of $(RO)_3SiC_nH_{2n+1}$, in which n is from 10 to 18 and R is alkyl. See col. 1, lines 22-27 of Ettlinger et al.

Examples of the organosilane include hexadecyltrimethoxysilane and octadecyltrimethoxysilane. See col. 2, lines 14 and 15 of Ettlinger et al.

Patentees' silicic acids are prepared in that the pyrogenically prepared silicic acids are placed in a mixer, and while being mixed the silicic acids are sprayed, optionally first with water and then with the organosilane compound; mixing is continued from 15 to 30 minutes, and then temperature stabilization is done at a temperature ranging from $100^{\circ}C$ to $160^{\circ}C$ over a period of time from 1 to 3 hours. See col. 2, lines 8-24 of Ettlinger et al.

The silanized silicic acids of Ettlinger et al. have properties comparable to those recited in Applicants' claim 7, except for the DBP value; however, given that the reference teaches the remaining claimed properties, one skilled in the art would anticipate the silanized silicic acids of Ettlinger et al. to exhibit a comparable DBP value. See Table 2 of Ettlinger et al.

The silanized silicic acids disclosed in Ettlinger et al. are employable as thickening agents in liquids, such as water-dilutable paints, resins, rubber, cosmetic articles, toner powders, as agents for improving pourability, and as reinforcing fillers. See col. 3, lines 13-20 of Ettlinger et al.

Neither Deller et al. nor Ettlinger et al. specifically disclose that the respective silanized pyrogenically produced silicas are "structurally modified".

Nargiello et al. disclose the production of low structure pyrogenic metal oxides, via subjecting said oxides to a dry milling process whereby the pyrogenically produced metal oxide is contacted in an agitating zone with an energy specific force. See the Abstract of Nargiello et al.

Exemplary metal oxides suitable for this process include pyrogenic silicon dioxide, which can be hydrophobized with silane/organosilicon compounds. See col. 6, lines 4-30 of Nargiello et al., where properties of said silicon dioxide are disclosed; note that these properties are comparable to that recited in Applicants' claim 7, and also to those disclosed in both Deller et al. and Ettlinger et al.

Nargiello et al. also disclose the feasibility in dry milling the aforementioned silicon dioxide, said feasibility including particle size reduction, reducing the DBP absorption, and increasing the bulk density. See col. 5, lines 46-67 of Nargiello et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of either Deller et al. or Ettlinger et al. by performing the additional dry milling process of Nargiello et al., and thereby obtain Applicants' invention, motivated by the teachings of Nargiello et al. regarding the dry milling of pyrogenic silicon dioxide.

Response to Arguments

In response to Applicants' arguments that the cited references of record, neither alone nor in combination, teach the claimed invention, the Examiner respectfully submits that Nargiello et al. is merely relied upon to show that dry milling of pyrogenic silicon dioxides is known, not to "replace the silicas of *Deller* or *Ettlinger*". The fact that Deller et al. "is concerned with establishing a certain pore size distribution" and that Ettlinger et al. "is concerned with a product having a desired thickening effect" does not detract the references from reading upon Applicants' claims in their present form, as they each disclose silanised pyrogenically produced silicas.

Declaration under 37 CFR 1.132

5. The Declaration under 37 CFR 1.132 filed September 6, 2007, is insufficient to overcome the rejection of claims 1, 4-7, 11, 12, and 14-20 based upon the 103(a) rejection thereof as set forth in the last (and in this) Office action because:

The Declaration is not commensurate in scope with the claimed invention. Although Declarant may explain that “*Deller* teaches away from the present invention because he makes larger particles from smaller ones”, which “represents essentially the reverse of what applicants do”, it is respectfully submitted that Applicants' claims in their present form recite a particle size range comparable to that disclosed by the prior art. Therefore, even if *Deller et al.* “make larger particles from smaller ones”, said larger particles appear to exhibit a size that reads upon that respectively claimed by Applicants.

For these reasons, Applicants' arguments are not persuasive.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICIA L. HAILEY whose telephone number is (571)272-1369. The examiner can normally be reached on Mondays-Fridays, from 7:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PATRICIA L. HAILEY/
Examiner, Art Unit 1793
March 17, 2008